

04645.0875

- 2 -

In the Claims:

1. (Currently amended) A coated substrate, which comprises:
  - a) a substrate of a conductive metal; and
  - b) a coating of at least a ruthenium-containing compound provided on a surface of the substrate, wherein the coating is characterized as comprising particles having been formed from an ultrasonically generated aerosol of the ruthenium-containing compound that is substantially devoid of a halide dissolved in a solvent that does not contain an ~~substantially devoid of~~ alcohol contacted with the substrate heated to at least about 250°C.
2. (Original) The coated substrate of claim 1 wherein the ruthenium-containing compound is a ruthenium-containing oxide, or a precursor thereof.
3. (Original) The coated substrate of claim 2 wherein the precursor of the ruthenium-containing oxide is selected from the group consisting of a nitrate, a sulfate, a phosphate and a chloride.
4. (Currently amended) The coated substrate of claim ~~2~~ 1 wherein the precursor is ~~either~~ ruthenium nitrosyl nitrate ~~or ruthenium chloride.~~

04645.0875

- 3 -

5. (Original) The coated substrate of claim 1 wherein a majority of the particles have diameters of less than about 10 microns.

6. (Original) The coated substrate of claim 1 wherein an internal surface area of the coating is about 10 m<sup>2</sup>/gram to about 1,500 m<sup>2</sup>/gram.

7. (Original) The coated substrate of claim 1 wherein the coating includes a second metal.

8. (Currently amended) The coated substrate of claim 7 wherein the second metal is selected from the group consisting of tantalum, titanium, nickel, iridium, platinum, palladium, gold, silver, cobalt, molybdenum, niobium, ~~ruthenium~~, manganese, tungsten, iron, zirconium, hafnium, rhodium, vanadium, osmium, and mixtures thereof.

9. (Original) The coated substrate of claim 1 wherein the coating is comprised of ruthenium and tantalum.

10. (Original) The coated substrate of claim 1 wherein the coating has a thickness of about a hundred Angstroms to about 0.1 millimeters.

04645.0875

- 4 -

11. (Original) The coated substrate of claim 1 wherein the substrate is selected from the group consisting of tantalum, titanium, nickel, molybdenum, niobium, cobalt, stainless steel, tungsten, platinum, palladium, gold, silver, copper, chromium, vanadium, aluminum, zirconium, hafnium, zinc, iron, and mixtures thereof.

12. (Original) The coated substrate of claim 1 wherein the substrate has a thickness of about 0.001 to 2 millimeters.

13. (Original) The coated substrate of claim 1 wherein the substrate is characterized as having had its surface area increased prior to being coated.

14. (Original) The coated substrate of claim 13 wherein the increased surface area is characterized as having been formed by contacting the substrate with an acid.

15. (Original) The coated substrate of claim 13 wherein the increased surface area is characterized as having been formed by mechanical means including rough threading, grit blasting, scraping, plasma etching, abrading and wire brushing the substrate.

04645.0875

- 5 -

16. (Original) The coated substrate of claim 1 wherein the substrate is characterized as having been cleaned by one of the group consisting of an aqueous degreasing solution, a non-aqueous degreasing solution and plasma cleaning prior to being coated.

17. (Original) The coated substrate of claim 1 wherein the substrate is characterized as having had its surface increased in electrical conductivity.

18. (Canceled)

19. (Original) The coated substrate of claim 1 wherein the aerosol is characterized as having been formed by subjecting the solution to ultrasonic sound waves at a substantially atmospheric pressure of at least about 600 millimeters of mercury.